
Therapeutic development of Oxy200, an oxysterol with bone anabolic and anti-resorptive properties for intervention in osteoporosis

Grant Award Details

Therapeutic development of Oxy200, an oxysterol with bone anabolic and anti-resorptive properties for intervention in osteoporosis

Grant Type: Therapeutic Translational Research Projects

Grant Number: TRAN1-10937

Investigator:

Name:	Farhad Parhami
Institution:	MAX BioPharma, Inc.
Type:	PI

Disease Focus: Bone or Cartilage Disease

Human Stem Cell Use: Adult Stem Cell

Award Value: \$1,689,855

Status: Pre-Active

Grant Application Details

Application Title: Therapeutic development of Oxy200, an oxysterol with bone anabolic and anti-resorptive properties for intervention in osteoporosis

Public Abstract:**Translational Candidate**

A novel oxysterol with bone anabolic and anti-resorptive activity that will effectively and safely treat osteoporosis better than current options.

Area of Impact

Osteoporosis that results in bone fractures.

Mechanism of Action

The proposed candidate will target Mesenchymal Stem Cells in the skeleton to stimulate their differentiation into bone forming osteoblasts that will rebuild the bone lost to the disease. In addition, the candidate will exert anti-resorptive effects due to presence of the bisphosphonate Alendronate that inhibits bone resorption. The candidate is an orally administered treatment that is designed to be delivered to bone.

Unmet Medical Need

The candidate fills a gap in bone anabolic agents for the treatment of osteoporosis. Currently only two FDA approved anabolic agents are available, both of which have limited use due to significant safety concerns and patient non-compliance due to daily subcu injections that cause adverse effects.

Project Objective

Initiate IND enabling studies, and Pre-IND meeting

Major Proposed Activities

- Scale up of candidate compound, Oxy200
- Determination of optimum dosing and pharmacokinetics
- Toxicology studies

Statement of Benefit to California:

MAX BioPharma's program has the potential to have a significant positive impact on the lives of patients with osteoporosis, especially in California where its unique demographics make it particularly vulnerable. Latinos are 31% more likely to have osteoporosis than Caucasians, and California has the largest Latino population in the US, accounting for 39% of its population. Data suggests hip fracture incidence has increased among Latinos from 1983 to 2000, while it fell among non-Latino women.

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